

man, Washington, June, 1892, by Prof. Louis F. Henderson, (n. 2,481) and in a neighboring locality and same month by Mr. W. R. Hull (n. 621).

Near *A. Lemmoni* Wats. but differing in the relatively much shorter and broader leaves, much more numerous flowers, distinctly exserted stamens and 3-parted spathe; differing from *A. platycaule* Wats. in its taller scape, shorter and broader perianth segments and crested ovary.

Calochortus ciliatus.—Low, 6–8 inches in height, branched above bulb ovate, $\frac{1}{2}$ an inch in diameter: leaf solitary, $2\frac{1}{2}$ –3 lines broad, equalling the 4–8-flowered stem: bracts linear, attenuate: flowers rather small: sepals ovate, acuminate, greenish-white, scarious-margined, 4–6 lines long: petals of equal length, light bluish-purple, paler towards the edges, triangular-lanceolate, rather abruptly narrowed at the base, conspicuously ciliate, glabrous except the yellow doubly fringed lunate scale of the gland: stamens half as long as the petals: anthers oblong, sagittate, apiculate, $2-2\frac{1}{2}$ lines in length: capsule elliptical in outline, acutely 3-winged, 7–8 lines long.—Collected by T. S. Brandegee, Wenatchie Region, Washington, July, 1883 (n. 1,107), and by Prof. L. F. Henderson on grassy slopes among pines, upper Nachez river, Yakima co., Washington, June, 1892 (n. 2,485).—B. L. ROBINSON and H. E. SEATON, *Gray Herbarium, Cambridge, Mass.*

EDITORIAL.

THERE IS an extraordinary diversity of usage in the matter of citation of references, much more than would be imagined by those who have not directed their attention to it. Writers who would be unsparing in their condemnation of carelessness in observation or experiment are strikingly careless in their citation of the work of others. Some papers on the contrary which have less value in themselves are characterized by such complete and accurate bibliography that they become valuable in spite of their scanty additions to knowledge.

It seems to us that the cardinal rule that should govern citations is that papers should be so cited that they can be found with the least possible expenditure of time and trouble by one who wishes to consult them. What information is indispensable will vary with the nature of the publication. For instance the citation "Bot. Gaz. 1890. 132" would enable one to find a given paper; but the citation "Bot. Centralb. 1890. 132" would not, since there are four pages bearing that number in the four volumes for 1890. If it were so cited the seeker might have to examine all of these before finding the one desired.

But even "Bot. Gaz. 1890. 132" is not adequate to the most ready finding of the reference. In binding such journals many libraries indicate on the back only the number of the volume. If the year only were cited two volumes or more might have to be taken down, whereas if the citation "Bot. Gaz. xvi (1890). 132" the paper could be found with the greatest ease, since no data are lacking.

In our opinion the following items should be given in a full citation: (1) the title of the article; (2) the name of the publication, if abbreviated at all abbreviated so as to be readily identified ("Jour. Bot." would not be so); (3) series number, if any; (4) volume number; (5) year; (6) page. Designating the part, heft, lieferung or fascicle is generally useless.

For the sake of greater uniformity of typography the GAZETTE has tentatively adopted that shown in the following samples. It would be a convenience if authors would follow this plan, or would agree upon some other in this time of botanical agreements.

VAN TIEGHEM et DOULIOT: Les racines des phanérogames. Ann. Sci. Nat. Bot. VII. VIII. (1891). 256.

VAN TIEGHEM: Traité de Bot. II. 398. Paris. 1891.

CURRENT LITERATURE.

Sachs' Writings on Vegetable Physiology.

In the domain of vegetable physiology there is one name that stands high above all others. It is that of Dr. Julius von Sachs, the eminent professor of botany in the University of Würzburg. He is not the father of the science, that honor belonging to Stephen Hales, an Englishman of a century ago, but he is its deliverer, having rescued it from an inconsequential condition, in which it received slight consideration, and by his rare insight and acute experimentation, his breadth of view and solidity of judgment, and especially by his ability in coördination, having placed it among the foremost of the several divisions of the science of botany. At the time he began to write more physiological work was done by chemists and physicists than by botanists, and the subject was not taught as a separate study; now laboratories and chairs are often exclusively devoted to it, and it has risen to equal dignity with the other departments of botany.

The writings of Dr. Sachs, which are the basis of this advancement, and to which every investigator must refer who desires to examine the original publication of facts discovered during the last thirty-five